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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,245	10/24/2001	J. Wallace Parce	100/00344	1258
21569	7590	09/15/2004	EXAMINER	
CALIPER LIFE SCIENCES, INC. 605 FAIRCHILD DRIVE MOUNTAIN VIEW, CA 94043-2234			CHIN, CHRISTOPHER L	
			ART UNIT	PAPER NUMBER
			1641	
DATE MAILED: 09/15/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/038,245

Applicant(s)

PARCE ET AL.

Examiner

Christopher L. Chin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 75-89 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 75-89 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 75-89 are pending. Claims 1-74 have been cancelled.

#### ***Claim Rejections - 35 USC § 112***

2. Claims 87-89 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 87 is vague and confusing. Lines 3-5 define the width of the main flow channel as the distance between the top and bottom of the channel and the depth of the main flow channel as the distance between channel sides. However, the conventional definition of depth is how the claim defines width and the conventional definition of width is how the claim defines depth.

3. Claims 75-89 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification, as originally filed, does not provide support for the device of claims 75 and 87. Claims 75 and 87 recite a first bridge channel "joining along said bottom of said main flow channel". The instant specification does not provide support a

bridging channel that connects to (or joins) the bottom of a main flow channel.

Applicants point to Figure 5, specifically how element 526 (a bridge channel) connects to main channel 510 for support for this limitation. However, Figure 5 only shows that the bridge channel, element 526, is connected to main channel 510. Figure 5 fails to show any indication that the bridge channel 526 is connected along the bottom of the main channel 510. Figure 5 shows that the bridge channel 526 and main channel 510 are both on the same plane, so the bridge channel 526 is not connected to the bottom of the main channel 510.

The specification, as originally filed, does not provide support for the device of claim 79. Claim 79 recites a plurality of bridge channels that are in fluid connection with the bottom of the main flow channel. Applicants point to Figures 3 and 4A-F and page 27, lines 26-37, of the specification for support. While the figures show a plurality of bridge channels in fluid connection with the main flow channel, there is no indication that the bridge channels are in fluid connection with the bottom of the main flow channel. The figures show that the bridge channels and main flow channel are all on the same plane, so the bridge channels are not connected to the bottom of the main flow channel.

The specification, as originally filed, does not provide support for the device of claims 80 and 81. Claim 80 recites a main flow channel depth of between about 100 micrometers and about 1 millimeter (1000 micrometers). Claim 81 recites a main flow channel depth between about 300 micrometers and about 800 micrometers. Applicants point to page 3, lines 33-36, of the specification for support which teaches that "at least

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one cross-section dimension of the channels is between 0.1 to 500 micrometers". The ranges in depth recited in claims 80 and 81 are not entirely supported by the section of the specification cited by Applicants. In claim 80, 501 micrometers to 1000 micrometers is not supported. In claim 81, 501 micrometers to 800 micrometers is not supported.

The specification, as originally filed, does not provide support for the device of claim 84. Claim 84 requires the main flow channel to have an "aspect ratio small enough to allow diffusion of particles from a second laminar fluid layer into a first laminar fluid layer at a rate which provides a detectable change in property". Applicants point to page 3, line 38 through page 4, line 6 and page 17, line 29 through page 18, for support for this limitation. However, the sections of the specification cited by Applicants fails to disclose any "aspect ratio" or define the aspect ratio of the main flow channel as being "small enough to allow diffusion of particles from a second laminar fluid layer into a first laminar fluid layer at a rate which provides a detectable change in property".

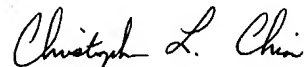
### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher L. Chin whose telephone number is (571) 272-0815. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher L. Chin  
Primary Examiner  
Art Unit 1641

9/13/04